REMARKS

Reconsideration of the Office action mailed on December 23, 2003 in connection with the above-identified patent application is requested in view of the foregoing amendments and the following remarks. Prior to entry of the above amendments, claims 1-20 were pending, with claims 1-5 and 19 rejected and claims 6-18 and 20 withdrawn from consideration after entry of Applicant's response to the (second) Restriction Requirement issued on October 6, 2003. By the above amendments, the specification and claims 9-11 are amended, claims 2, 5, 8, 13-18, and 20 are cancelled without prejudice, and new claims 21-30 are added.

Specification

As an initial matter, the Examiner objects to the specification because the serial numbers were missing for several of the patent applications identified in the specification. By the above amendments, the missing serial numbers have been added, and a typographical error on page 8 has been corrected.

Special Circumstances

In the Office action mailed December 23, 2003, the Examiner asks Applicant to point out any material information from the co-pending applications listed as parents to the instant application if the criteria for materiality applies and if the examination record provides reason for Applicant to believe that the Examiner has not considered such information. Applicant is uncertain what the Examiner is requesting. Applicant has identified previously the applications and believes that identification satisfies its duty of disclosure. Nevertheless, in an attempt to respond to the request, Applicant has attached to the end of this document as "Attachment 1" a list of its patent applications

and its one Taiwanese patent (the list does not include the national phase filings of the listed PCT application). None of the listed applications have yet issued as patents. The Examiner is requested to inform Applicant if further information concerning any of these applications is needed.

Double Patenting

Claims 1-5 and 19 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2, 4-5, 8, and 14-18 of co-pending Application No. 10/215,929, claims 1,3, 5-6, 12-13, 16 and 18 of co-pending Application No. 10/929,237, claims 1-29 of co-pending Application No. 10/929,240, claims 1-20 of co-pending Application No. 10/146,527, claims 1-11 of co-pending Application No. 10/929,236, claims 1-29 of co-pending Application No. 10/929,235, claims 22-26 of co-pending Application No. 10/929,241, and claims 1-20 of co-pending Application No. 10/052,274. Applicant assumes that the above-cited '235, '236, '237, '240 and '241 applications mistakenly included the prefix "10" and were intended to be Applicant's 09/929,235, 09/929,236, 09/929,237, 09/929,240 and 09/929,241 applications. Applicant understands that these rejections may be withdrawn when they are the only rejections remaining in this application in order to allow the application to proceed to issuance. MPEP § 804. Additionally, a number of the cited claims of the co-pending applications have been or will be amended or cancelled without prejudice, and as a result, one or more of the double patenting rejections may now be or may become moot. In light of these facts, Applicant requests that the discussion of the obviousness-type double patenting rejections be held in abeyance pending resolution of the remaining issues discussed herein. If the remaining issues are

resolved, then Applicant requests that the double patenting rejections be withdrawn so that the application may proceed to issuance.

Statement Under 37 C.F.R. 1.78(c)

The Examiner requires Applicant under 35 U.S.C. § 103(c) and 37 C.F.R. 1.78(c) to state whether the inventions claimed in the applications cited as the bases for the double patenting rejections were commonly owned at the time the invention claimed in the present application was made. In response, SD3, LLC states that the inventions claimed in the present application and in the co-pending applications cited by the Examiner were commonly owned or subject to an obligation of assignment to SD3, LLC at the time each later invention was made. The undersigned is authorized to make this statement on behalf of SD3, LLC. By making this statement Applicant does not concede that the cited claims are conflicting claims, that the double patenting rejections are proper, or that the proposed modifications to the subject matter of applicant's copending applications in view of one or more issued third-party patents are properly made or supported by the required teaching or motivation.

Claim Rejections – 35 U.S.C. § 102(f)

Claims 1-5, and 19 stand rejected under 35 U.S.C. § 102(f) on the grounds that Applicant did not invent the claimed subject matter. Specifically, the Examiner said, "It is not clear who actually invented the subject matter of claims 1-5 and 19 because each of the above co-pending applications [referring to the co-pending applications cited to support the double patenting rejections] have different inventive entities." This rejection is traversed.

The inventors named in the present application are the inventors of the subject matter claimed in the present application. Multiple individuals are named as inventors because each individual made a contribution to the subject matter of at least one claim of the application, even though each individual may not have made the same type or amount of contribution and even though each individual may not have made a contribution to the subject matter of every claim in the application. Different inventive entities are named in a number of the co-pending applications cited by the Examiner because other individuals made contributions to the subject matter of at least one claim of each such application. The fact that inventive entities may be different in various applications does not mean that inventorship is incorrect in the present application. Often applications with overlapping subject matter but with additional disclosures and differing sets of claims have different inventive entities. That is the situation here. The present application and the co-pending applications cited by the Examiner have disclosures and claims that differ and that require the naming of different inventive entities. Thus, there is no inconsistency in inventorship. Accordingly, Applicant requests the rejection under 35 U.S.C. § 102(f) be withdrawn.

Claim Rejections – 35 U.S.C. § 103

Claims 1-2 and 19 stand rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 4,653,189 to Andreasson in view of U.S. Patent No. 3,858,095 to Friemann et al. The rejection of these claims is traversed. (The rejection of claim 2 is moot because applicant has cancelled that claim without prejudice. Applicant cancelled that claim to pursue it or other similar claims in one of applicant's co-pending applications or in a subsequent continuation application.)

Beginning initially with claim 1, and as the Examiner correctly recognized in the Office action, Andreasson fails to disclose an actuator that is capable of braking a cutting tool within approximately 3 milliseconds or less. However, the Examiner says that Friemann discloses the need to stop a cutting tool as fast as possible, such as within 5 milliseconds, and therefore the Examiner concludes that it would have been obvious to have the brake of Andreasson actuate within 5 milliseconds. The Examiner further states that it would be further obvious to have the brake of Andreasson actuate within 3 milliseconds because discovering an optimum value of a result-effective variable involves only routine skill in the art. Applicant respectfully traverses and requests reconsideration of the rejections of claims 1 and 19 for at least the reasons presented below.

Claim 1 is reproduced below for the Examiner's convenience and recites a woodworking machine that is different from the machines disclosed in Andreasson and Friemann.

- 1. A woodworking machine comprising:
- a support frame;
- a motor supported by the frame;
- a cutting tool supported by the frame and moveable by the motor;
- a detection system adapted to detect contact between a person and the cutting tool;
- a brake component adapted to engage and stop movement of the cutting tool, where the brake component has a ready position spaced apart from the cutting tool; and
- an actuator having stored energy sufficient to move the brake component from the ready position into engagement with the cutting tool within approximately 3 milliseconds or less after contact between a person and the cutting tool is detected.

As presented above, claim 1 recites, amongst other structure, a detection system that is adapted to detect contact between a person and the cutting tool of a

woodworking machine, a brake component that is adapted to engage and stop movement of the cutting tool, and an actuator having stored energy sufficient to move the brake from its spaced-apart ready position into engagement with the cutting tool in approximately 3 milliseconds or less after the contact between the person and the cutting tool is detected.

As an initial matter, Applicant respectfully traverses and requests withdrawal of the rejections of claim 1 and 19 as the timing recited in the claim is not fairly characterized as a result-effective variable having an optimum value that involves only routine skill in the art to determine. Applicant understands the general policy behind such rejections, such as when determining a suitable temperature within a disclosed temperature range or an optimum concentration within certain disclosed limits. However, in the context of claim 1, the claim recites an actuator that is adapted to move the brake from its ready position into engagement with the cutting tool within approximately 3 milliseconds or less after contact between a person and the cutting tool is detected. The cited references fail to disclose or suggest such an actuator. Perhaps more importantly, and as discussed in more detail here, neither cited reference, nor the proposed combination thereof, discloses structure capable of providing the recited actuation. Unlike a result-oriented situation, where a value within a disclosed or claimed range of values is held to be obvious, the present situations involves moving a brake component into engagement with a cutting tool within a very short time interval – a time interval that simply cannot be met by the structures disclosed in the cited references. Therefore, in addition to the following reasons why the recited references, and even the proposed combination thereof, fail to disclose or suggest the structure recited in claim 1, Applicant submits that the rejections of claims 1 and 19 should be withdrawn simply because the leap from the disclosed systems to a system with an actuator according to claim 1 is neither disclosed nor otherwise supported by the cited references. The references, even if properly combined, simply cannot provide the actuator recited in claim 1.

In the Office action, Andreasson is cited as disclosing the structure recited in claim 1 except for timing of the actuator. While Applicant agrees with the Examiner that Andreasson fails to disclose or suggest the actuator recited in claim 1, Applicant further submits that Andreasson fails to disclose or suggest at least the detection system recited in claim 1.

Andreasson discloses a system used in a chain saw to address kick-back. Kick-back is where the saw is thrown back toward the operator during operation. Andreasson says the rpm of a chain saw motor decreases suddenly when kick-back occurs and the system in Andreasson watches for that decrease in rpm. When it sees that decrease, the system actuates a chain brake to stop the saw. Specifically, the system charges a capacitor and uses the energy stored by the capacitor to actuate the brake when a sudden decrease in motor rpm is detected. However, the system in Andreasson is specifically adapted to monitor the rpm of the motor and to detect sudden changes thereto. Perhaps more importantly, the system of Andreasson does not and cannot detect contact between a person and the cutter. Instead, Andreasson watches for a sudden decrease in the rpm of the motor and interprets any such decrease as kick-back. While Applicant recognizes the advantages of preventing kickback, the detection system of claim 1 is directed to a system that detects contact between a person and the

example, a person may touch the cutting tool, and potentially be seriously injured thereby, without having much, if any, change of the output rpm of the motor. Expressed in other terms, the system of Andreasson is designed to actuate responsive to events related to contact between the cutting tool and the tree or similar wooden object being cut, whereas claim 1 is directed to a system that actuates responsive to contact between a person and the cutting tool. This distinction is significant and cannot be ignored. While Applicant's machine may be adapted to prevent kickback through the appropriate mechanism, claim 1 is directed to a machine that (in addition to any other functionality) is responsive to contact between a person and the cutting tool.

For at least the reasons expressed above, Andreasson fails to disclose or suggest a system that is adapted to actuate a brake component responsive to detection of contact between a person and a cutting tool, much less to actuate the brake component within approximately 3 milliseconds or less after this contact is detected. As Andreasson fails to disclose or suggest at least these two aspects of claim 1, the rejections can only be maintained if Friemann discloses these aspects and there is sufficient teaching and motivation to make the combination proposed in the Office action. As discussed in more detail below, neither of these requirements is satisfied.

Friemann discloses a protective circuit for a band cutter. The circuit includes an oscillator with a voltage output connected to a bridge circuit. The bridge circuit is balanced until an operator touches the band cutter, at which time the bridge circuit becomes unbalanced and a voltage is transmitted to an amplifier circuit which, in turn, trips a relay to apply DC braking to the motor and to supply power to an

electromechanical brake. (Friemann, column 3, line 35 to column 4, line 6.) Friemann states that its system will brake the motor "so that the band cutter 5 stops in less than 1/100th second." (Friemann, column 4, lines 5-6.) However, it is not possible that the band saw disclosed in Friemann could stop the blade within that time frame because Friemann must also stop the motor and pulleys in order to stop the blade, and all of those components have substantial mass and inertia. For example, assuming two pulleys (Figure 2 in Friemann actually shows four pulleys numbered 6, 7, 8 & 9) each having a mass of 2 kg and a radius of 20 cm, the torque required to stop the pulleys in 10 milliseconds would be approximately 250 N/M. That would require approximately a 15 hp motor. However, the armature of the motor also would have to be stopped, and the armature would most probably have inertia greater than the pulleys, thus increasing the required torque. In fact, a typical band saw motor would not even be able to stop itself in 10 milliseconds, let alone the pulleys. The electromagnetic brake would be of little more help. By way of example, a Stearns SM-250 electromagnetic clutch/brake that sells for almost \$1000, can provide only about 200 N/M of stopping torque, and that force could only be applied after actuation of the clutch/brake. Thus, even with the combination of the motor and an expensive electromagnetic brake, the system described in Friemann would not stop the blade in 10 milliseconds. Moreover, Friemann relies on switching of relays to control actuation of the brake and motor. (Friemann, column 3, lines 35-68.) However, relays normally take 5-15 milliseconds to operate, so it is questionable whether Friemann's electromagnetic brake or motor brake could even be engaged within 10 milliseconds. Accordingly, there is no reasonable expectation that the system disclosed in Friemann could be successfully combined with the system

disclosed in Andreasson to arrive at a machine according to claim 1. Without that reasonable expectation of success, a conclusion of obviousness is improper because the references should not be combined. MPEP § 2143.02.

In addition to the failure of Friemann to disclose an actuator capable of moving a brake component into contact with a cutting tool within approximately 3 milliseconds or less, Friemann also fails to disclose or suggest a brake component that is adapted to engage and stop movement of the cutting tool, as recited in claim 1. Instead, Friemann specifically discloses D.C. braking of the motor of the band saw, with optional electromagnetic braking of the motor's pulley or flywheel. Nowhere does Friemann disclose or suggest any form of brake component that is adapted to engage and stop movement of the cutting tool.

In view of the above, it is apparent that Andreasson fails to disclose at least the detection system and the high-speed actuator recited in claim 1, and Friemann fails to disclose or suggest at least the brake component and high-speed actuator recited in claim 1. The proposed modification of Andreasson, as set forth in the Office action, would increase the speed at which the brake may be applied. However, it would still not overcome the fact that Andreasson discloses a detection system that is very different from the detection system recited in claim 1. Therefore, a more complete combination of the disclosures of the cited references would be required. Even if such a piecemeal combination of the references is utilized, the combination still fails to disclose the actuator recited in claim 1. For at least this additional reason, Applicant submits that the rejection of claim 1 should be withdrawn.

Applicant further submits that the rejection should be withdrawn because the proposed combination of the references is not supported by the required teaching or motivation to make this combination. In applying 35 U.S.C. § 103, the references must be considered as a whole and must suggest the desirability, and thus, the obviousness of making the combination. As stated by the Federal Circuit in <u>In re Fritch</u>, 23 USPQ2d 1780 (Fed. Cir. 1992):

[T]he Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art. 'The Examiner can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.' ... Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so. Although couched in terms of combining teaching found in the prior art, the same inquiry must be carried out in the context of a purported obvious 'modification' of the prior art. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. ... This court has previously stated that '[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the invention.' Id. at 1783-4.

Moreover, the references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention. Hodosh v. Block Drug Co., Inc., 786 F.2d 1136 (Fed. Cir. 1986). As such, the mere fact that the references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680 (Fed. Cir. 1990). In the case at hand, there is no reason to make the proposed combination other than to reject claim 1. However, such a motivation is insufficient support therefor, so the rejection should be withdrawn.

The fact that the cited references fail to teach or suggest the machine set forth in claim 1 means that the references by themselves cannot establish obviousness. The MPEP expressly says: "To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." MPEP §2143.03 (citations omitted).

Even if the cited references disclosed all of the limitations in the claims, the claims would still not be obvious because there is no teaching, suggestion or motivation in the prior art to combine the chainsaw kickback detection system of Andreasson with the contact-based band saw system of Friemann. The MPEP explains: "Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art." MPEP §2143.03. In other words, the desirability of the combination must be suggested by the prior art or known by persons of ordinary skill in the art. If not, then the combination is improper. MPEP §2143.

In the case at hand, the Examiner says that it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have the brake of Andreasson be capable of actuation within 5 milliseconds, and that it would be further obvious the make the brake be capable of actuation within 3 milliseconds to increase the ability of the device to prevent accidents. However, the simple desire to make the brake actuate more quickly or otherwise be safer cannot by itself be sufficient motivation to combine the references. If it were, then almost no safety improvement could be

patented. Rather, there must be some express or implicit teaching, suggestion or motivation in the prior art to make the specifically claimed combination. Expressed differently, it is not the desire to make something better but the solution that must be suggested or taught. Accordingly, this means there must be some express or implicit teaching or suggestion in the prior art to modify Andreasson to provide the machine recited in claim 1. For example, there must be some teaching or suggestion to modify Andreasson to include both a detection system adapted to detect contact between a person and a cutting tool, and an actuator adapted to move a brake component into engagement with the cutting tool within approximately 3 milliseconds or less after this contact is detected. Where in the prior art is there such a suggestion? In fact, why would a person of ordinary skill in the art think to modify the chain saw disclosed in Andreasson to detect contact instead of a sudden decrease in the rpm of the chainsaw's motor? Friemann also fails to make that suggestion because there is no reasonable expectation that the detection system disclosed in Friemann would work on the band saws disclosed in Friemann, much less chain saws or other woodworking machines. MPEP 2143.02.

For at least the reasons discussed above, Applicant submits that neither cited reference, nor the proposed combination thereof, disclose or render obvious the machine recited in claim 1. Applicant further submits that the rejection of claim 1 should be withdrawn because the cited references to Andreasson and Friemann teach away from combination proposed in the Office action.

The proposed modification of the chainsaw kick-back prevention of Andreasson into a contact-based detection system would require substantial reconstruction and

redesign of the chainsaw and would effectively change the basic principle under which the chainsaw's safety system was designed to operate. Accordingly, the proposed modification would undermine the spirit and intended purpose of Andreasson and thereby should be withdrawn. (see MPEP 2143.01) Under MPEP § 2143.01 and established case law, when evaluating whether there is sufficient suggestion or motivation to combine references, Examiners must consider, among other factors, whether the prior art suggests the desirability of the claimed invention, whether the proposed modification renders the prior art unsatisfactory for its intended purpose, and whether the proposed combination changes a principle of operation of a reference. See In re Linter, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972); In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984); In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). For at least these additional reasons, the rejection of claim 1 should be withdrawn.

Independent claim 19 is reproduced below for the Examiner's convenience.

19. A woodworking machine, comprising: a cutting tool adapted to cut workpieces; means for driving the cutting tool; means for detecting contact between a person and the cutting tool; a brake component spaced apart from the cutting tool; and means for moving the brake component into contact with the cutting tool within 3 milliseconds or less after contact between a person and the cutting tool is detected.

Claim 19 is similar to claim 1 in that it is directed to a woodworking machine adapted to detect contact between a person and a cutting tool and to move a brake component into contact with the cutting tool within 3 milliseconds or less after contact between the person and the cutting tool is detected. Claim 19 differs from claim 1 in that claim 19 recites several elements in a means-plus-function format. With that

wording, the elements must be interpreted "to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. §112. Andreasson, however, fails to disclose any structure, material, or acts equivalent to the corresponding structures described in applicant's specification, and therefore, Andreasson does not disclose the recited means-plus-function limitation. In a similar manner, Friemann also fails to disclose structure, material, or acts equivalent to the corresponding means-plus-function elements recited in claim 19 and described in applicant's specification. Accordingly, Applicant requests that the rejection of claim 19 be withdrawn. Applicant also requests withdrawal of the rejection of claim 19 for the reasons expressed above with respect to the impropriety of the proposed combination of Andreasson and Friemann.

Claims 3-5 stand rejected under 35 U.S.C. § 103(a) as being obvious over the above-discussed proposed modification of Andreasson in view of Friemann, in further view of U.S. Patent No. 3,695,116 to Baur and U.S. Patent No. 5,606,889 to Bielinski. (The rejection of claim 5 is moot because applicant has cancelled that claim without prejudice. Applicant cancelled that claim to pursue it or other similar claims in one of applicant's co-pending applications or in a subsequent continuation application.) While the Examiner recognizes that the proposed combination of Andreasson and Friemann fails to disclose an electromechanical actuator, much less a spring-biased actuator and/or a spring-biased actuator that is electrically responsive by tensioned wires, the Examiner states that it would have been obvious to further modify the already modified structure of Andreasson to include these spring-biased actuators. The Examiner cites the above-identified patents to Baur and Bielinski as providing the required teaching and

motivation for these additional modifications to the structure of Andreasson. The Examiner also took official notice that it is old and well-known to replace brakes and springs when they are worn out.

Claims 3 and 4 depend from claim 1 and therefore should be allowed when claim 1 is allowed. Accordingly, Applicant submits that the rejections of claims 3 and 4 are moot in view of the many reasons for which the rejection of claim 1 should be withdrawn. However, and for the purpose of completeness, Applicant has studied the cited references, including the proposed four- or five-way modification of the structure of Andreasson. Applicant respectfully submits that the proposed modification not only lacks the required teaching and motivation to be properly made, but also fails to disclose the machine recited in claims 3 and 4. As discussed previously, Andreasson discloses a chain saw with a detection system that monitors the motor's rpm for sudden changes, such as might occur between sequential 20 millisecond revolutions of the saw's chain (the disclosed 3000 rpm operating speed corresponds to 20 milliseconds per revolution), to determine if kickback is occurring. Therefore, the system of Andreasson not only fails to disclose and teaches away from a detection system that monitors for contact between a person and a cutting tool, but also fails to disclose an actuator that is adapted to move a brake component into contact with the cutting tool within approximately 3 milliseconds or less.

The currently proposed combination replaces the detection system upon which the entire Andreasson patent is based with a contact-based detection system for a band saw. The combination further requires ignoring the fact that the contact-based detection system discloses an actuator that is not capable of moving the brake component into contact with the cutting tool within approximately 3 milliseconds or less, as well as the fact that the contact-based system requires a brake component for a motor and teaches away from a brake component that engages and stops the cutting tool.

In the context of claims 3 and 4, this proposed combination is further modified to require a spring-biased actuator, which Andreasson and Friemann apparently fail to disclose or necessitate according to their disclosures, and then to have the springbiased actuator include a fusible member that must be replaced after every use. Claims 3 and 4 do not require this fusible member. Applicant recognizes that it is initially tempting to utilize hindsight reconstruction to selectively draw discrete elements from many different references to reconstruct the subject matter recited in a particular claim. Such a modification, based on hindsight reconstruction, is improper and withdrawal of the rejection is requested. In fact, the law is "clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references." In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) (citations omitted). A suggestion, teaching or motivation to combine or modify references "must be clear and particular." <u>Id.</u> (citation omitted). "Broad conclusory statements regarding the teaching of multiple references, standing alone, are not 'evidence'" of a suggestion, teaching or motivation to combine references. Id. (citation omitted). Furthermore, the Federal Circuit cautioned that combining prior art references without such a teaching, suggestion or motivation, "simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability--the essence of hindsight." Id. (citation omitted).

Page 37 - FIRST AMENDMENT Serial No. 09/929,227

There is no clear and particular suggestion, teaching or motivation to make the proposed four-way combination of Andreasson, Friemann, Baur and Bielinski. As such, Applicant requests that the rejections of claims 3 and 4 be reconsidered and withdrawn.

Withdrawn Claims

Prior to entry of the above amendments, claims 6-18 and 20 were withdrawn from consideration in view of Applicant's responses to the Restriction Requirements issued for the above-identified patent application. Original claims 6-7 depend from claim 1. Accordingly, Applicant requests that claims 6-7 be reinstated when claim 1 is allowed. By the above amendments, withdrawn claims 8, 13-18 and 20 have been cancelled without prejudice so that the present application can proceed to allowance. Withdrawn claims 9-11 have been amended to depend from claim 1. While still presently withdrawn from consideration, Applicant requests that claims 9-12 be reinstated when claim 1 is allowed because they now depend directly or indirectly from claim 1.

With the entry of the above amendments, and for the reasons discussed herein, Applicant submits that all of the issues raised in the December 23, 2003 Office action have been addressed and overcome. If there are any remaining issues or if the Examiner has any questions, Applicant's undersigned attorney may be reached at the number listed below. Similarly, if the Examiner believes that a telephone interview may be productive in advancing prosecution of the present application, the Examiner is invited to contact Applicant's undersigned attorney at the number listed below.

Respectfully submitted,

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Attachment 1

<u>Title</u>	Serial No./ Publication No.	Filing Date/ Publication Date
Detection System For Power Equipment	09/929,426 2002-0017176-A1	August 13, 2001 February 14, 2002
Contact Detection System For Power Equipment	60/225,200	August 14, 2000
Apparatus And Method For Detecting Dangerous Conditions In Power Equipment	09/929,221 2002-0017336-A1	August 13, 2001 February 14, 2002
Apparatus And Method For Detecting Dangerous Conditions In Power Equipment	60/225,211	August 14, 2000
Firing Subsystem For Use In A Fast-Acting Safety System	09/929,240 2002-0020263-A1	August 13, 2001 February 21, 2002
Firing Subsystem For Use In A Fast-Acting Safety System	60/225,056	August 14, 2000
Spring-Biased Brake Mechanism For Power Equipment	09/929,227 2002-0020271-A1	August 13, 2001 February 21, 2002
Spring-Biased Brake Mechanism For Power Equipment	60/225,170	August 14, 2000
Brake Mechanism For Power Equipment	09/929,241 2002-0017180-A1	August 13, 2001 February 14, 2002
Brake Mechanism For Power Equipment	60/225,169	August 14, 2000
Retraction System For Use In Power Equipment	09/929,242 2002-0017181-A1	August 13, 2001 February 14, 2002
Retraction System For Use In Power Equipment	60/225,089	August 14, 2000
Replaceable Brake Mechanism For Power Equipment	09/929,236 2002-0020261-A1	August 13, 2001 February 21, 2002
Replaceable Brake Mechanism For Power Equipment	60/225,201	August 14, 2000
Brake Positioning System	09/929,244 2002-0017182-A1	August 13, 2001 February 14, 2002
Brake Positioning System	60/225,212	August 14, 2000
Logic Control For Fast-Acting Safety System	09/929,237 2002-0020262-A1	August 13, 2001 February 21, 2002
Logic Control For Fast-Acting Safety System	60/225,059	August 14, 2000

Page 40 - FIRST AMENDMENT Serial No. 09/929,227

<u>Title</u>	Serial No./ Publication No.	Filing Date/ Publication Date
Motion Detecting System For Use In A Safety System For Power Equipment	09/929,234 2002-0017178-A1	August 13, 2001 February 14, 2002
Motion Detecting System For Use In A Safety System For Power Equipment	60/225,094	August 14, 2000
Translation Stop For Use In Power Equipment	09/929,425 2002-0017175-A1	August 13, 2001 February 14, 2002
Translation Stop For Use In Power Equipment	60/225,210	August 14, 2000
Translation Stop For Use In Power Equipment	60/233,459	September 18, 2000
Cutting Tool Safety System	09/929,226 2002-0017183-A1	August 13, 2001 February 14, 2002
Cutting Tool Safety System	60/225,206	August 14, 2000
Table Saw With Improved Safety System	09/929,235 2002-0017184-A1	August 13, 2001 February 14, 2002
Table Saw With Improved Safety System	60/225,058	August 14, 2000
Miter Saw With Improved Safety System	09/929,238 2002-0017179-A1	August 13, 2001 February 14, 2002
Miter Saw With Improved Safety System	60/225,057	August 14, 2000
Fast Acting Safety Stop	60/157,340	October 1, 1999
Safety Systems For Power Equipment	09/676,190	September 29, 2000
Fast-Acting Safety Stop (Taiwan)	143466	February 25, 2002
Fast-Acting Safety Stop	60/182,866	February 16, 2000
Safety Systems for Power Equipment (PCT)	PCT/US00/26812	September 29, 2000
Miter Saw With Improved Safety System	10/052,806 2002-0059855-A1	January 16, 2002 May 23, 2002
Miter Saw With Improved Safety System	60/270,942	February 22, 2001
Contact Detection System For Power Equipment	10/053,390 2002-0069734-A1	January 16, 2002 June 13, 2002
Contact Detection System For Power Equipment	60/270,011	February 20, 2001

<u>Title</u>	Serial No./ Publication No.	Filing Date/ Publication Date
Power Saw With Improved Safety System	10/052,273 2002-0059853-A1	January 16, 2002 May 23, 2002
Power Saw With Improved Safety System	60/270,941	February 22, 2001
Table Saw With Improved Safety System	10/052,705 2002-0056350-A1	January 16, 2002 May 16, 2002
Table Saw With Improved Safety System	60/273,177	March 2, 2001
Miter Saw With Improved Safety System	10/052,274 2002-0059854-A1	January 16, 2002 May 23, 2002
Miter Saw With Improved Safety System	60/273,178	March 2, 2001
Miter Saw With Improved Safety System	10/050,085 2002-0056349-A1	January 14, 2002 May 16, 2002
Miter Saw With Improved Safety System	60/273,902	March 6, 2001
Miter Saw With Improved Safety System	10/047,066 2002-0056348-A1	January 14, 2002 May 16, 2002
Miter Saw With Improved Safety System	60/275,594	March 13, 2001
Safety Systems For Power Equipment	60/275,595	March 13, 2001
Miter Saw With Improved Safety System	10/051,782 2002-0066346-A1	January 15, 2002 June 6, 2002
Miter Saw With Improved Safety System	60/279,313	March 27, 2001
Safety Systems for Power Equipment	10/100,211 2002-0170399-A1	March 13, 2002 November 21, 2002
Safety Systems For Power Equipment	60/275,583	March 13, 2001
Router With Improved Safety System	10/197,975 2003-0015253-A1	July 18, 2002 January 23, 2003
Router With Improved Safety System	60/306,202	July 18, 2001
Translation Stop For Use In Power Equipment	09/955,418 2002-0020265-A1	September 17, 2001 February 21, 2002
Translation Stop For Use In Power Equipment	60/292,081	May 17, 2001
Band Saw With Improved Safety System	10/146,527 2002-0170400-A1	May 15, 2002 November 21, 2002
Band Saw With Improved Safety System	60/292,100	May 17, 2001

Page 42 - FIRST AMENDMENT Serial No. 09/929,227

<u>Title</u>	Serial No./ Publication No.	Filing Date/ Publication Date
Apparatus And Method For Detecting Dangerous Conditions In Power Equipment	10/172,553 2002-0190581-A1	June 13, 2002 December 19, 2002
Apparatus And Method For Detecting Dangerous Conditions In Power Equipment	60/298,207	June 13, 2001
Discrete Proximity Detection System	10/189,031 2003-0002942-A1	July 2, 2002 January 2, 2003
Discrete Proximity Detection System	60/302,937	July 2, 2001
Actuators for Use in Fast-Acting Safety Systems	10/189,027 2003-0005588-A1	July 2, 2002 January 9, 2003
Actuators For Use In Fast-Acting Safety Systems	60/302,916	July 3, 2001
Actuators For Use In Fast-Acting Safety Systems	10/205,164 2003-0020336-A1	July 25, 2002 January 30, 2003
Actuators For Use In Fast-Acting Safety Systems	60/307,756	July 25, 2001
Safety Systems for Power Equipment	10/215,929 2003-0037651	August 9, 2002 February 27, 2003
Safety Systems For Power Equipment	60/312,141	August 13, 2001
Safety Systems For Band Saws	10/202,928 2003-0019341-A1	July 25, 2002 January 30,2003
Safety Systems For Band Saws	60/308,492	July 27, 2001
Router With Improved Safety System	10/251,576 2003-0056853-A1	September 20, 2002 March 27, 2003
Router With Improved Safety System	60/323,975	September 21, 2001
Logic Control With Test Mode For Fast-Acting Safety System	10/243,042 2003-0058121-A1	September 13, 2002 March 27, 2003
Logic Control With Test Mode For Fast-Acting Safety System	60/324,729	September 24, 2001
Detection System for Power Equipment	10/292,607 2003-0090224-A1	November 12, 2002 May 15, 2003
Detection System For Power Equipment	60/335,970	November 13, 2001

<u>Title</u>	Serial No./ Publication No.	Filing Date/ Publication Date
Apparatus and Method for Detecting Dangerous Conditions in Power Equipment	10/345,630 2003-0131703-A1	January 15, 2003 July 17, 2003
Safety Systems For Power Equipment	60/349,989	January 16, 2002
Brake Pawls for Power Equipment	10/341,260 2003-0140749-A1	January 13, 2003 July 31, 2003
Brake Pawls For Power Equipment	60/351,797	January 25, 2002
Miter Saw With Improved Safety System	10/643,296	August 18, 2003
Miter Saw With Improved Safety System	60/406,138	August 27, 2002
Retraction System And Motor Position For Use With Safety Systems For Power Equipment	60/452,159	March 5, 2003
Table Saws With Safety Systems And Blade Retraction	60/496,550	August 20, 2003
Brake Cartridges For Power Equipment	60/496,574	August 20, 2003
Switch Box For Power Tools With Safety Systems	60/533,598	December 31, 2003
Motion Detection System For Use In A Safety System for Power Equipment	60/496,568	August 20, 2003
Improved Detection Systems For Power Equipment	60/533,791	December 31, 2003
Improved Fence For Table Saws	60/533,852	December 31, 2003
Improved Table Saws With Safety Systems	60/533,811	December 31, 2003
Brake Cartridges And Mounting Systems For Brake Cartridges	60/533,575	December 31, 2003
Improved Table Saws With Safety Systems and Systems to Mount and Index Attachments	60/540,377	January 29, 2004